

Claims

1. Rotary piston machine with a housing and at least one rotor, characterized by an inner housing with the following distinguishing features

- a cylindrical borehole, going over into a spherical recess, for taking up rotors (2, 3) disposed at an axial angle to one another,
- an opening in the spherical recess, through which a shank of the one rotor (3), disposed on a shaft (7), is passed,
- a centering relative to the rotors (2, 3), which can be shifted freely in the axial and radial directions for equalizing manufacturing tolerances of the rotors (2, 3),
- a protection against torsion (11, 12) with respect to the housing (10),
- a device (13) to prevent movement of the inner housing (1) in the axial direction away from the rotors (2, 3) and
- at least one opening (16) in the inner housing (1) at the place, at which the fluid enters or leaves at the outer radius of the rotors (2, 3), for transferring the pressure of the flowing fluid to the spaces outside of the inner housing (1) for producing an additional contacting pressure between the inner housing (1) and the rotors (2, 3) for minimizing the gap flows.

2. The rotary piston machine of claim 1, characterized by a device (14, 15) for pressing the rotors (2, 3) and the inner housing (1) together in the axial direction.